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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,908	07/30/2003	Keiko Tazaki	DAIN:743	6084
6160	7590	04/07/2005	EXAMINER	
PARKHURST & WENDEL, L.L.P. 1421 PRINCE STREET SUITE 210 ALEXANDRIA, VA 22314-2805			WANG, GEORGE Y	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,908

Applicant(s)

TAZAKI ET AL.

Examiner

George Y. Wang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 7-9 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Claims 1-6, 10, and 11 in the reply filed on January 7, 2004 is acknowledged. The traversal is on the ground(s) that the search and examination of the entire application can be made without serious burden. This is not found persuasive because each of the groups depicted and claimed presents a unique species which would create an undue burdensome search on Examiner.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-6, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshida et al. (U.S. Patent No. 5,680,188, hereafter "Yoshida").

4. As to claim 1, Yoshida discloses an optical element (fig. 19) comprising a liquid crystal layer (fig. 19, ref. 416) made of liquid crystalline material and a protective layer

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(fig. 19, ref. 421) formed on the liquid crystal layer having a hardness high enough to prevent the LC layer from being deformed by externally exerted forces (col. 20, 3-19).

5. As per claim 3, Yoshida discloses an optical element as recited above where the protective layer is made from a material that comprises a resin and a monomer (col. 20, 5-11).

6. Regarding claims 4-5, Yoshida discloses an optical element as recited above where the LC material has a nematic and cholesteric regularity (col. 9, lines 52-58).

7. As to claim 6, Yoshida discloses an optical element as recited above further comprising an alignment substrate (fig. 19, ref. 411) that supports that LC layer and is disposed on the LC layer opposite to a surface of the protective layer.

8. As per claim 10, Yoshida discloses an optical element as recited above further comprising a color filter layer (fig. 19, ref. 417b) of a light absorption type disposed between the liquid crystal layer and the protective layer.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida in view of Nishida et al. (U.S. Pub. No. 2004/0048950, hereafter "Nishida").

11. Regarding claim 2, Yoshida discloses an optical element as recited above, however, the reference fails to specifically disclose the protective layer having a modulus of elasticity of 0.6 or more as determined by the standards of the universal hardness test method.

Nishida discloses an optical element with a protection layer that has a sufficient hardness required to avoid adverse effects to color properties as well as other non-pollution properties (p. 1, [0008]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the protective layer having a modulus of elasticity of 0.6 or

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more as determined by the standards of the universal hardness test method since one would be motivated to avoid adverse effects to color properties as well as other non-pollution properties (p. 1, [0008]). Furthermore, it is well known in the art that protective layers protect. As a result, a modulus of elasticity that is "0.6 or more" merely indicates that the layer is sufficiently hard to protect from adverse effects.

12. As to claim 11, Yoshida discloses an optical element as recited above with a color filter of a light absorption type, however, the reference fails to specifically disclose the a color filter layer being disposed on the surface of the protective layer opposite to the surface of the LC layer.

Nishida discloses an optical element where the color filter (fig. 1, ref. 7) is disposed on the surface of the protective layer (fig. 1, ref. 8) opposite to the surface of the LC layer (fig. 1, ref. 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a color filter disposed on the surface of the protective layer opposite to the surface of the LC layer since one would be motivated to avoid adverse effects to color properties as well as other non-pollution properties (p. 1, [0008]).

Conclusion


13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Y. Wang whose telephone number is 571-272-2304. The examiner can normally be reached on M-F, 8 am - 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gw
April 1, 2005



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